Total coliforms/ Escherichia coli by Chromogenic/ Fluorogenic Test MPN SM 20 <sup>th</sup> / 21 <sup>st</sup> Ed. 9223 B Page 1 of 3							
Facility Name:							
Assessor Name:Analyst Name:		Inspection Date					
Relevant Aspect of Standards	Method Reference	Υ	N	N/A	Comments		
Records Examined: SOP Number/ Revision/ Date Analyst:							
Sample ID: Date of Sample Pi	reparation:						
Are duplicate analyses performed on 10% of samples and on at least one sample per test run?. If the laboratory conducts less than 10 tests/week, are duplicate analyses made on at least one sample each week?	9030 B.8. <i>a</i> .4						
Are sterile bottles or presterilized plastic bags used for sample collection?	9030 B.18						
Is all glassware properly sterilized? Glass sample bottles are sterilized either at 170°C (or 160 °C with uniformity check) for at least 60 minutes or autoclaved at 121°C for 15 minutes. Pipettes are sterile disposable; or sterilized in a metal container at 170°C for not less than 2 hours.	9040						
Are sample volumes not less than 100 mL?	9060 A.4						
When sample is collected, does sample bottle have ample air space to facilitate mixing by shaking, before analysis?	9060 A.3						
Are samples analyzed on the day of receipt or refrigerated overnight after receipt by the lab?	9060 B.1. <i>b</i> .						
Is the maximum holding time for drinking water samples 30 hours from collection to analysis?	9060 B.1. <i>b.</i>						
Are the appropriate commercially available formulations used for the analysis?	9223 B.1						
Is the substrate stored at 2-30°C away from direct sunlight?	9223 B.1						
Is discolored media discarded?	9223 B.1						
Notes/ Comments:							

Is each lot of media tested for performance by inoculation with three control bacteria: Escherichia coli, a total coliform other than E. coli (e.g.,		T		
Enterobacter cloacae), and a noncoliform. If Pseudomonas is used as the noncoliform, select a nonfluorescent species.	9223 5, 9020 B. 8. 3)			
Is a sterile water control tested with each new lot of media? If the sterile water control exhibits faint fluorescence or faint positive coliform result, is the lot discarded and a new batch of substrate used?	9223 5			
If the multi-well procedure is used, is substrate added to 100 mL of sample, shaken vigorously, poured into tray and sealed?	9223 B.2.b			
If the presence-absence procedure is used, is substrate added to 100 ml of sample in a sterile, transparent, non-fluorescent plastic or borosilicate glass bottle and shaken to dissolve?	9223 B. 2. c			
If using the multi-tube procedure, is the appropriate number of tubes per sample selected and labeled, and are serial dilutions prepared following manufacturer's instructions?	9223 B.2.a			
For the multi-tube procedure, is the appropriate volume of sample dispensed into each tube, and mixed well with the substrate?	9223 B.2.a			
Are trays/bottles/tubes incubated at 35 ± 0.5°C for 24 hours (18 hours for Colilert 18 Test)?	9223 B.2.a			
After incubation, are tubes mixed by inversion when the color response is not uniform?	9223 B.3.a			
Is an appropriate color comparator used to check the chromogenic response for each sample, and are total coliforms considered present when the sample color is yellow and the color intensity is greater than or equal to the comparator?	9223 B.3.a			
If a chromogenic response is questionable after 24 hours (or 18 hrs. for Colilert-18), are the samples incubated up to an additional 4 hours and rechecked?	9223 B.3.a			
Is an appropriate reference comparator used to check fluorescence for each positive total coliform sample, while examining under a long-wavelength (366-nm) ultraviolet lamp (preferably 6-W bulb)?	9223 B.3.b		_	
Notes/ Comments:				

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If fluorescence is questionable, are samples incubated for an additional 4 hours and rechecked?	9223 B.3.b			
Is the MPN value correctly calculated for total coliforms and/or <i>E. coli</i> from the number of positive tubes or wells, using the manufacturer's MPN chart?	9221 C, 9223 B.4			
If using the presence/absence procedure for drinking water, report results as total coliform and <i>E. coli</i> present or absent in 100 mL sample.	9223 B.4			
For Drinking Water Compliance Samples, does the laboratory analyzing compliance samples immediately notify the VDH-ODW of all positive results?	1VAC30-40-30			
For Drinking Water Compliance Samples, does the laboratory analyzing compliance samples complete the appropriate VDH-ODW Sample Input Form and report the analysis result to the VDH-ODW within three days of completion date of sample analysis?	1VAC30-40-40			
Notes/ Comments:				